

I/WE CLAIM

1. A vending machine comprising:
a cabinet frame including top, bottom, side and rear walls that collectively define a central cavity;
a plurality of column walls defining a plurality of stack areas for storing product containers;
a door pivotally mounted to the cabinet frame, said door being adapted to selectively close the central cavity;
an oscillator pivotally mounted at a lower portion of one of the plurality of stack areas, said oscillator including a frame defining a product retention zone, said product retention zone including first and second staging regions, with each of said first and second staging regions incorporating upper and lower holding elements that retain product containers in three dimensions for subsequent vending operations; and
a bail cap attached to the oscillator, said bail cap including an intermediate portion adapted to selectively support product containers in said one of the plurality of stack areas, said bail cap being adjustable relative to the oscillator in order to accommodate product containers of varying sizes in the product retention zone.

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2. A vending machine comprising:
a cabinet frame including top, bottom, side and rear walls that collectively define a central cavity;
a plurality of column walls defining a plurality of stack areas for storing product containers;
a door pivotally mounted to the cabinet frame, said door being adapted to selectively close the central cavity;

an oscillator pivotally mounted at a lower portion of one of the plurality of stack areas, said oscillator including a frame defining a product retention zone; and

a bail cap attached to the oscillator, said bail cap including an intermediate portion adapted to selectively support product containers in said one of the plurality of stack areas, said bail cap being adjustable relative to the oscillator in order to accommodate product containers of varying sizes in the product retention zone.

3. The vending machine according to claim 2, wherein the bail cap is rotatably attached to the oscillator.

4. The vending machine according to claim 3, wherein the intermediate portion of the bail cap is arcuate in cross-section.

5. The vending machine according to claim 2, wherein the bail cap includes an adjusting element for selectively positioning the bail cap relative to the oscillator.

6. The vending machine according to claim 5, wherein the frame of the oscillator includes top, bottom and opposing end plates, said top plate including a plurality of notches adapted to receive the adjusting element.

7. The vending machine according to claim 6, wherein the adjusting element includes a sliding mechanism having first and second end stops, each of said first and second end stops being adapted to selectively seat within one of the plurality of notches to establish a desired angular position of the bail cap relative to the oscillator.

8. The vending machine according to claim 2, wherein the intermediate portion is asymmetrical so that mounting the bail cap to the oscillator in a first orientation establishes a first angular position of the bail cap relative to the oscillator, and mounting the bail cap to the oscillator in a second orientation establishes a second angular position of the bail cap relative to the oscillator, wherein the first and second angular positions correspond to particular product container sizes.
9. The vending machine according to claim 8, wherein said bail cap includes first and second end portions extending from the intermediate portion, said first and second end portions being snap-fittingly attached to the oscillator.
10. A vending machine comprising:
- a cabinet frame including top, bottom, side and rear walls that collectively define a central cavity;
 - a plurality of column walls defining a plurality of stack areas for storing product containers;
 - a door pivotally mounted to the cabinet frame, said door being adapted to selectively close the central cavity;
 - an oscillator pivotally mounted at a lower portion of one of the plurality of stack areas, said oscillator including a frame defining a product retention zone, said product retention zone including first and second staging regions, with each of said first and second staging regions incorporating upper and lower holding elements that retain product containers in three dimensions for subsequent vending operations; and

a bail cap attached to the oscillator, said bail cap including an intermediate portion adapted to selectively support product containers in said one of the plurality of stack areas.

11. The vending machine according to claim 10, wherein the first staging region is offset from the second staging region.
12. The vending machine according to claim 10, wherein the oscillator frame includes top, bottom and opposing end plates, said bail cap being attached to the oscillator along the opposing end plates.
13. The vending machine according to claim 12, wherein the bottom plate includes a plurality of stepped notches in each of the first and second staging regions.
14. The vending machine according to claim 13, wherein the plurality of stepped notches are constituted by terraced lands extending from the bottom plate.
15. The vending machine according to claim 14, further comprising: an angled product delivery chute, said oscillator being spaced from the angled product delivery chute to define a vend height, wherein the terraced lands maintain a substantially constant vend height between the angled product delivery chute and the first and second staging regions.
16. The vending machine according to claim 10, wherein said oscillator is adapted to retain two product containers in each of the first and second staging regions.

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17. A method of adjusting a product dispensing system for a vending machine to accommodate various sized product containers comprising:
 exposing a bail cap and oscillator of the product dispensing system;
and
 adjusting the bail cap relative to the oscillator.
18. The method of claim 17, wherein adjusting the bail cap includes rotating the bail cap relative to a frame of the oscillator.
19. The method of claim 18, wherein rotating the bail cap relative to the oscillator is accomplished by shifting a sliding adjuster element provided on the bail cap to move a stop member from a first position to a second position, said first and second positions defining different angular orientations of the bail cap relative to the oscillator.
20. The method of claim 18, wherein rotating the bail cap includes:
 detaching the bail cap from the oscillator;
 reversing the bail cap 180°; and
 attaching the bail cap to the oscillator.
21. The method of claim 20, wherein the bail cap is snap-fittingly attached to the oscillator.